

**UNITED STATES DEPARTMENT OF COMMERCE****Patent and Trademark Office**Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/280,518 04/05/99 FUJIWARA

K 32739M008

MMO2/0913  
BEVERIDGE DEGRANDI WEILACHER & YOUNG  
SUITE 800 1850 M STREET N W  
WASHINGTON DC 20036

EXAMINER

YOCKEY, D

ART UNIT	PAPER NUMBER
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2861

DATE MAILED:

09/13/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/280,518	FUJIWARA, KENSUKE
Examiner	Art Unit	
David Yockey	2861	

-- The MAILING DATE of this communication app ars on th cover sh et with the correspond nc address --  
Peri od for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

#### Status

1) Responsive to communication(s) filed on 29 June 2000.

2a) This action is FINAL.                  2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-5 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-5 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved.

12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. § 119

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) All b) Some \* c) None of the CERTIFIED copies of the priority documents have been:

1. received.

2. received in Application No. (Series Code / Serial Number) \_\_\_\_\_ .

3. received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

#### Attachment(s)

15) Notice of References Cited (PTO-892)                  18) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_ .

16) Notice of Draftsperson's Patent Drawing Review (PTO-948)                  19) Notice of Informal Patent Application (PTO-152)

17) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ .                  20) Other: \_\_\_\_\_ .

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

#### **Claims 1-2:**

It is unclear how a predetermined laser intensity can be divided into a plurality of intervals; the claim is interpreted to mean that an interval of intensities including a predetermined laser intensity is divided into a plurality of intervals.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Applicant's admission of prior art as illustrated in Figs. 5 and 6 and accompanying discussion in the specification (referred to hereinafter as 'APA') in view of Arevalo (US 6,104,986).

APA discloses an iterative algorithm for determining a particular value (laser intensity) for a particular constant value (potential), wherein a photoreceptor is exposed

and measured to provide information so as to determine whether the measured value matches the constant value. However, APA does not suggest the claimed algorithm including the repeated and converging division of intensity into intervals.

Arevalo clearly discloses the claimed algorithm in general in Fig. 4. While Arevalo does not disclose application of the algorithm to laser intensity adjustment, the disclosure is reasonably pertinent to the claimed invention since it solves the same problem of determining the optimal value of a variable for a given constant variable in the same manner as Applicant. The purpose of implementation of the algorithm is to reduce the length of an optimization process; as suggested in the Background and Summary of the Arevalo disclosure. Further, the APA and Arevalo prior art disclosures considered together suggest that the Arevalo algorithm is faster in optimizing than the APA algorithm. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the algorithm disclosed by Arevalo in combination with exposure and measurement disclosed by APA for the purpose of reducing the length of optimization in adjustment of the laser intensity for a particular potential. Setting of a laser intensity greater than a suitable maximum intensity is suggested since the tested value is suggested to always with the range being tested (see column 5, lines 44-67).

#### ***Response to Arguments***

Applicant's arguments filed 29 June 2000 have been fully considered but they are not persuasive.

Applicant's arguments with respect to claims 1-5 have been considered but are moot in view of the new ground(s) of rejection.

***Pertinent Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Robert (JP 4-255874) discloses recording a plurality of test patterns and selecting laser intensity based upon a selected optimum test pattern.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Yockey whose telephone number is (703) 308-3084. The examiner can normally be reached on all weekdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, N. Le can be reached on (703) 308-0750. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-3432 for regular communications and (703)305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



DAVID F. YOCKEY  
PRIMARY EXAMINER

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September 10, 2000